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## **Overview**

## Identification

## **COUNTRY**

Niger

## **EVALUATION TITLE**

Roads for Market Access

### TRANSLATED TITLE

Projet d'irrigation et d'accès aux marchés, Routes pour faciliter l'accés aux marchés

#### **EVALUATION TYPE**

Independent Evaluation

#### **ID NUMBER**

DDI-MCC-NER-IDG-ROAD-2019-v01

## Version

## **VERSION DESCRIPTION**

Not applicable to this evaluation; no quantitative data to be shared

## Overview

#### **ABSTRACT**

The evaluation will address the following evaluation areas:

Evaluation Area 0 examines whether the RMA Activity was implemented according to plan. The analysis will focus on highlighting any deviations of implementation from the original Compact design to fully understand how the RMA Activity was implemented. Since the Compact is on-going (2018 – 2023), the evaluation team will monitor the program implementation and document any changes made to the original design.

Evaluation Area 1 tests the economic viability of MCC-funded roads by conducting a cost-benefit analysis (CBA) to estimate the economic rate of return and net present value (NPV) of the roads. The CBA will employ two models: 1) the Highway Development and Management (HDM)-4 model, an analytical tool used to conduct CBA for roads, and 2) the Roads Economic Decision (RED) model, a tool developed by the Sub-Saharan Africa Transport Policy Program (SSATP) for unpaved roads. Using baseline and endline data, the post-Compact CBA will re-evaluate the validity of the initial assumptions made prior to the Compact. An updated economic rate of return (ERR) of the MCC-funded roads will inform MCC on economic viability of large road infrastructure projects.

Evaluation Area 2 will evaluate the road maintenance regime within Niger to test the sustainability of improvement in road infrastructure. Examining the political and economic factors shaping road maintenance decisions and practices will improve MCCs assumption on post-Compact maintenance and project-life assumptions about its infrastructure investments. In particular, Evaluation Area 2 will assess whether MCC's investment in improving maintenance practices, including the performance-based road management and maintenance contracts, were effective in improving Niger's maintenance practices.

Evaluation Area 3 is a study of road users to understand the type of beneficiaries from the RMA Activity. The data collected for Evaluation Area 3 will inform the HDM-4 and RED model. Information such as the cost and duration of the trips and value of the goods being transported will be analyzed. This evaluation area is also intended to understand any change over time in road users and their travel patterns before and after the Activity.

Evaluation Area 4 is an analysis of the transportation market structure. This evaluation area will analyze transportation market structure, both formal and informal, to understand how cost savings from road improvements have passed on to transport consumers who do not own their own vehicles. The analysis of the formal and informal institutions of the transportation market will inform whether vehicle operating cost savings are passed on to road users who do not own their

own vehicle, such as farmers transporting their goods to market and public ransportation users.

Below are the key evaluation questions for each evaluation area:

Evaluation Area 0: Project Implementation

1) Was the project implemented according to plan?

Evaluation Area 1: Engineering Analysis and Economic Model

2) What is the economic return – calculated in terms of vehicle operating cost savings and travel time (TT) savings – of the road investment? What factors drove changes to the ERR over time? How could the project have been designed to result in a higher ERR?

Evaluation Area 2: Maintenance

- 2A) To what extent have the road maintenance reforms been implemented and how has that affected the sustainability of the road investments? To what extent have the roads been maintained, whether through the performance-based road management and maintenance contracts or other mechanisms? Based on this assessment, what set of maintenance assumptions should be used in the economic model to yield the best estimate of the costs and benefits of the road investment?
- 2B) In cases where MCC invested in improving maintenance practices or included a maintenance Conditions Precedent in the Compact (applicable to Niger), what were the effects of those efforts and why?
- 2C) What political and economic factors are shaping road maintenance decisions and practices in Niger? How did this change from before the MCC intervention to after? What evidence is there that MCC facilitated those changes (if relevant)?

Evaluation Area 3: Road Usage Patterns

3) Have road usage patterns changed, in terms of who is traveling along the improved roads, why, what they are transporting, what they are paying for transport, and how long it takes to move along key routes?

Evaluation Area 4: Transportation Market Structure

4) How is the transportation market structured and what is the likelihood that VOC savings will be passed on to consumers of transportation services? Did this change from before the MCC intervention to after? If yes, what caused the changes?

#### **EVALUATION METHODOLOGY**

Independent Ex-Post ERR and HDM-4

## **UNITS OF ANALYSIS**

Individuals, administrative units, enterprises

## KIND OF DATA

Other

## **TOPICS**

Topic	Vocabulary	URI
Transportation	MCC Sector	
Capacity Building and Institutional Development	MCC Sector	

### **KEYWORDS**

Niger, Roads, Roads for Market Access, Irrigation and Market Access, HDM-4, ERR, RN7, RN35, RRS, transportation

## Coverage

## **GEOGRAPHIC COVERAGE**

Dosso Department

#### **UNIVERSE**

N/A

## **Producers and Sponsors**

## PRIMARY INVESTIGATOR(S)

Name	Affiliation
International Development Group Advisory Services	

### **FUNDING**

Name	Abbreviation	Role
Millennium Challenge Corporation	MCC	

## **Metadata Production**

#### **METADATA PRODUCED BY**

Name	Abbreviation	Affiliation	Role
Millennium Challenge Corporation	MCC		Review of Metadata
International Development Group Advisory Services	IDG		Independent Evaluator

### **DDI DOCUMENT VERSION**

Version 1.1 (September 2019). This is the original version.

#### **DDI DOCUMENT ID**

DDI-MCC-NER-IDG-ROAD-2019-v01

## MCC Compact and Program

## **COMPACT OR THRESHOLD**

Niger Compact

## **PROGRAM**

The Millennium Challenge Corporation (MCC) and the Government of Niger (GON) signed a five-year, USD 437 million Compact on July 29, 2016, which entered into force on January 26, 2018. The Compact objective is to "increase rural incomes by improving the sustainable productive use of natural resources for agricultural production and improving trade and market access for agricultural products." The Compact is composed of two projects: 1) Irrigation and Market Access Project (IMAP) and 2) Climate-Resilient Communities (CRC). There are four activities under the IMAP: 1) Irrigation Perimeter Development (IPD), 2) Management Services and Market Facilitation (MSMF), 3) Roads for Market Access (RMA), and 4) Policy Reform. MCC allocated USD 113 million to the RMA Activity as part of the IMAP. The RMA Activity complements the other activities under the IMAP by reducing trade barriers, improving physical market access through targeted improvements of the road network serving the Dosso-Gaya perimeters, and linking the perimeters to the rest of the country. The sub-activities under the RMA Activity are: 1) rehabilitation and paving of National Road (RN7) from Dosso to Bella II (83 km), 2) rehabilitation and gravel upgrade of RN35 from Margou to Gaya (180 km), and 3) rehabilitation and gravel upgrade of a rural road linking RN35 and RN7 (37 km), referred to as Route Rurale de Sambera (RRS).

## **MCC SECTOR**

Transport (Trans)

# **Sampling**

N/A

Study Population
N/A
Sampling Procedure
N/A
Deviations from Sample Design
N/A
Response Rate
N/A
Weighting

# Questionnaires

No content available

# **Data Collection**

## **Data Collection Dates**

Start	End	Cycle	
2019-11-01	2019-12-31	Baseline	
2026-02-01	2026-11-30	Endline	

## **Data Collection Notes**

N/A

## **Data Processing**

No content available

# **Data Appraisal**

**Estimates of Sampling Error** 

N/A